

RADIANT

MISTRAL

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Product



Multi-Chemistry AC/DC Peak Detection Balance Charger

Part Numbers

RDNA0464	Mistral LED LiPo-NiMH 5A Charger (US)
RDNA0465	Mistral LED LiPo-NiMH 5A Charger (UK)
RDNA0466	Mistral LED LiPo-NiMH 5A Charger (EU)



For more information , please visit:
www.RadiantRC.com.

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MADE IN CHINA

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MISTRAL



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FOREWORD

Thank you purchasing the Mistral Multi-Chemistry Balance charger. The Mistral offers the perfect combination of user-friendly simplicity and intelligent programming. Sporting both AC and DC power options, an intuitive user interface and clear LED status lights, it is ideal for use at home, field, trackside, or lakeside. Please read and understand this entire operating manual before using this product, as it covers a wide range of information on both the operation of the Mistral charger and safety. If in any doubt, please seek the help of an experienced user, contact support or contact the dealer where you purchased your product.

Specifications

Input Voltage:	110-240V AC or 11-18V DC
Max charge Power:	50W
Charge Current Range:	0.1-5A
Cell Battery Current:	300mAh/Cell
NiMH Battery Cell Count:	1-15 Cells
LiPo Battery Cell Count:	2-6 Cells
Balance Connectors:	JST-XH 2-6S
Leads:	HCT / Tamiya / Futaba / XT60
Dimensions:	145 x 78 x 47mm
Weight:	255g

- Before using the Mistral charger, review all documentation and inspect the product carefully. If for some reason you decide it is not what you wanted, then do not continue with unpacking, setup or operation of your product. Your local hobby dealer cannot accept a product for return or exchange if the product or packaging shows signs of wear and tear.
- Product specifications are subject to change without notice. Due to ongoing development, the actual product may vary from images shown.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
- This product is not a toy! (14+) Recommended for ages 14 and up. Adult supervision required for ages under 18 years old. Contains small parts, keep out of reach of children 3 years of age and younger.

GENERAL CHARGING PRECAUTIONS

Although great for first time users, Radiant RC products contain advanced and sophisticated electronics that could result in injury if used improperly. Always use caution and common sense, as failure to operate your Radiant RC product in a safe and responsible manner can result in damage to the product or surrounding property. This product is not intended for use or maintenance by children without direct adult supervision. Radiant RC and your local hobby dealer shall not be liable for any loss or damages, whether direct, indirect, special, incidental, or consequential, arising from the use, misuse, or abuse of this product or any product required to operate or maintain it. Here are some general tips that will help increase the safe operation and enjoyment of using your charger.

- Do not operate your charger in direct sunlight, rain, electrical, or during thunder storms
- A battery should not be connected to the charger until the charger has been connected to an input power source
- Never operate your charger where the input power is unstable
- Never attempt to charge a non-rechargeable battery or battery type that is not compatible with this charger
- Always operate in a dry, open environment away from property and cars
- Always disconnect the battery from the charger after the charge or discharge cycle is complete
- Never insert anything into the charger case due to risk of electrical shock or interference with the cooling fan
- Always allow batteries to completely cool before charging

NOTE: Only use genuine replacement or aftermarket parts available from your local hobby dealer.

TIPS FOR SAFELY OPERATING YOUR CHARGER

- Avoid charging on or around flammable items
- Never attempt to charge a swollen or damaged battery
- Never leave the battery unattended while charging
- Never operate the charger without adult supervision
- Never charge a warm battery, always allow the battery to cool to room temperature before charging
- Inspect the battery and charger before use. Never charge a battery or operate a charger if the wire or connector has been damaged or if the battery has experienced a short circuit
- Incorrect use of the battery, connections, or charging equipment can cause personal injury or property damage
- Never allow batteries or charger to come in contact with moisture at any time; avoid environments with high humidity
- Disconnect input power and battery immediately if the battery, connector, or charger becomes hot or changes form (swells, bulges, indents, etc.) during use.

CONTENTS

Identify the contents of your Mistral charger.

The Mistral charger can be powered from a mains supply using the included AC Power Input Lead, or from a 12-18V DC power supply such as an automotive battery using the DC Power Input Lead.

Do not connect the Mistral to both AC and DC power supplies at the same time.

When connected, the Mistral will emit a series of beeps.

IMPORTANT

The Mistral has vents on both sides and a built-in fan which is located on the right hand side panel. Do not obstruct the airflow around the charger.



VERY IMPORTANT - PLEASE READ AND UNDERSTAND

The Radiant Mistral charger has the capability of charging LiPo/LiLo (LiXX) and NiCd/NiMH (NiXX) batteries. Each battery type requires significantly different charging modes. It is extremely important to choose the correct charging mode when charging your batteries. Choosing the wrong charging mode can cause a fire or explosion. Be sure to properly identify the battery chemistry, voltage and capacity of every pack before attempting to charge it to ensure the correct settings. If you are unsure of the battery type you are attempting to charge, please consult your local hobby dealer for assistance.

CHARGING A BATTERY

Important! Before connecting a battery it is absolutely essential to check that you know the chemistry of the battery you wish to charge. To avoid short-circuits between the banana plugs, always connect the charge lead to the charger first, and only then connect the battery. Reverse the sequence when disconnecting the pack. Disconnect the battery from the charge lead BEFORE you disconnect the charge lead from the charger.

When charging LiXX batteries the pack's JST-XH balance plug must be connected to the Mistral's balance socket.

The method for charging is similar for all battery types. When powered up, the charger defaults to LiPo.



1. Select the battery chemistry by giving the selector button a momentary press to cycle between LiPo, LiLo and NiMH/NiCd.



2. Select the desired charge current using the selector knob. Do not exceed a charge rate of 1C (for an 2000mAh battery, this is 2.0A).



3. Press and hold the selector knob down until the charger emits a beep and then release to commence charging.

CHARGING A LIPO BATTERY

Connect your battery as shown.

1. Connect the Mistral to an AC or DC power supply.
2. Connect the charge lead to the Mistral
3. Connect the battery's T-style connector to the charge lead.
4. Connect the battery's balance plug to the Mistral's balance socket.

5. Confirm that the LiPo indicator LED is illuminated.



6. Choose the required charge current by turning the selector knob to the desired current.



NOTE: Do not exceed a charge rate of 1C. For an 1800mAh pack this equates to a charge current of around 2.0A. Similarly, a 3000mAh pack would be charged at 3.0A.

7. Press and hold the selector knob down until the charger emits a beep to begin the charge process. The red LED will change from red to a flashing green.
8. The charge process is complete when the charger emits a series of beeps and the flashing green LED turns to a solid green LED.
9. Disconnect the LiPo battery from the charge lead and then disconnect the charger.



CHARGING A LiIon BATTERY

Connect your battery as shown.

1. Connect the Mistral to an AC or DC power supply.
2. Connect the charge lead to the Mistral
3. Connect the battery's T-style connector to the charge lead.
4. Connect the battery's balance plug to the Mistral's balance socket.

5. Confirm that the LiLo indicator LED is illuminated.



6. Choose the required charge current by turning the selector knob to the desired current.



NOTE:

Do not exceed a charge rate of 1C. For a 2000mAh pack this equates to a charge current of around 2.0A. For the 1000mAh battery shown above, you should charge at 1.0A

7. Press and hold the selector knob down until the charger emits a beep to begin the charge process. The red LED will change from red to a flashing green.
8. The charge process is complete when the charger emits a series of beeps and the flashing green LED turns to a solid green LED.
9. Disconnect the LiLo battery from the charge lead and then disconnect the charger.



CHARGING A NiMH or NiCd BATTERY

Connect your battery as shown.

1. Connect the Mistral to an AC or DC power supply.
2. Connect the charge lead to the Mistral
3. Connect the battery's T-style connector to the charge lead.

5. Confirm that the NiMH/NiCd indicator LED is illuminated.



6. Choose the required charge current by turning the selector knob to the desired current.



NOTE:

Do not exceed a charge rate of 1C. For an 1800mAh pack this equates to a charge current around 2.0A.

7. Press and hold the selector knob down until the charger emits a beep to begin the charge process. The red LED will change from red to a flashing green.
8. The charge process is complete when the charger emits a series of beeps and the flashing green LED turns to a solid green LED.
9. Disconnect the NiMH battery from the charge lead and then disconnect the charger.



TROUBLESHOOTING

During charging or at the initiation of the charge sequence, if you experience a sequence of three flashing red LEDs and a audible tone, the charger has detected a fault with the battery or the balance lead is not plugged in.

WARRANTY AND SERVICE

Radiant products are covered by the currently valid statutory warranty regulations.

Radiant and its authorised representatives accept no liability for loss, damage or costs which are caused by the incorrect or incompetent use of the product. For further information, please see the attached Warranty document that is applicable to your territory.

CONFORMITY INFORMATION



WEEE

This appliance is labelled in accordance with European Directive 2012/19/EU concerning Waste Electrical and Electronic Equipment (WEEE).

The WEEE Directive came into force to reduce the disposal of domestic waste and promote recycling. Any electrical item that carries the crossed out wheeled bin logo must not be disposed of in domestic waste but should be taken to a designated collection facility.

J Perkins (Distribution) is a member of an approved compliance scheme to encourage consumers to recycle unwanted items. Your local authority will be able to provide details of your nearest approved waste disposal site.



CE Conformity

J Perkins (Distribution) confirms this product is in compliance with the relevant harmonised European directives relating to its safe operation.

To see a copy of the relevant Declaration of Conformity visit:
<http://www.radiantrc.com/support>



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